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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,710	10/09/2001	Peggy-Jean P. Flanigan	55526US003	7863
32692	7590	07/18/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			SIMONE, CATHERINE A	
PO BOX 33427			ART UNIT	
ST. PAUL, MN 55133-3427			PAPER NUMBER	
			1772	

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/974,710	Applicant(s) FLANIGAN ET AL.	
	Examiner Catherine Simone	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-8, 10-17, 19-22, 26-53 and 55-60 is/are pending in the application.
- 4a) Of the above claim(s) 36-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-8, 10-17, 19-22, 26-35, 53 and 55-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Withdrawn Objections/Rejections

1. The objection of claim 6 of record in the Office Action mailed 11/29/05, Page 2, Paragraph #2 has been withdrawn due to the Applicants amendment filed 4/28/06.
2. The 35 U.S.C. 112 rejection of claim 19 of record in the Office Action mailed 11/29/05, Pages 2-3, Paragraph #4 has been withdrawn due to the Applicants amendment filed 4/28/06.
3. The 35 U.S.C. 102(a) rejection of claims 56-60 as anticipated by Mikami et al. of record in the Office Action mailed 11/29/05, Page 3, Paragraph #4 has been withdrawn due to the Applicants amendment filed 4/28/06.
4. The 35 U.S.C. 102(b) rejection of claims 1, 3-8, 11, 13 and 21 as anticipated by Tajima et al. of record in the Office Action mailed 11/29/05, Pages 8-9, Paragraph #9 has been withdrawn due to the Applicants amendment filed 4/28/06.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3-8, 11, 13, 19-21 and 28-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Abe (WO 99/58620).

Regarding claim 1, Abe discloses an article comprising at least one adhesive layer with a first major surface and a second major surface (Figs. 3, #303 and Fig. 4, #403), wherein at least one of the first and second major surfaces is a structured surface; and a backing (Fig. 3, #301 and/or #302, and Fig. 4, #401 and/or #402) laminated to the structured surface of the adhesive layer (Fig. 3, #303 and Fig. 4, #403) wherein the exposed surface of the backing is unstructured, wherein the article comprises discrete reservoirs between the structured surface of the adhesive layer and the backing (see page 9, lines 30-31), and wherein the article has a non-structured exposed surface that can be adhered to a target substrate (Fig. 4, #405). Regarding claims 3 and 4, note the at least one adhesive layer comprises a pressure sensitive adhesive selected from acrylics and natural rubbers (see page 8, lines 21-23). Regarding claim 5, note the article has a thickness of about 2 μm to about 500 μm (see page 9, lines 8-10). Regarding claim 6, note the adhesive layer is a structured adhesive layer (Figs. 3 and 4, #303 and #403). Regarding claim 7, note at least one further non-adhesive layer (Fig. 4, #401) in contact with one of the first and second major surfaces. Regarding claim 8, note the article comprises a non-structured exposed surface (Figs. 3 and 4). Regarding claim 11, note a plurality of channels (see page 10, lines 10-15). Regarding claim 13, the channels contain at least one deliverable or non-deliverable substance (see page 10, lines 10-15). Regarding claim 19, note the backing is a laminate (Fig. 3, #301 and #302). Regarding claim 20, note the second major surface is a non-structured surface (Fig. 4, #403), the backing (Fig. 4, #401 and/or #402) contacts the first major surface, and wherein the article further comprises a backing layer on the second major surface (Fig. 4, #405). Regarding claim 21, the second major surface is a structured surface (Fig. 4, #403), the backing

contacts the first major surface (Fig. 4, #405), and wherein the article further comprises a backing layer on the second major surface (Fig. 4, #401 and/or #402).

Regarding claim 28, note Abe discloses a laminate article comprising a first adhesive layer (Fig. 3, #303) having a first major surface and a second major surface, wherein at least one of the first and second major surfaces is a structured surface, and a second adhesive layer (Fig. 3, #302) having a first major surface and second major surface, wherein at least one of the first and second major surfaces is a structured surface, wherein the first adhesive layer and the second adhesive layer are in contact. Regarding claim 29, note the first major surface of the first adhesive layer is a structured surface and the second major surface of the first adhesive layer is a non-structured surface (Fig. 3, #303), and the first major surface of the second adhesive layer is a structured surface and the second major surface of the second adhesive layer is a non-structured surface (Fig. 3, #302), and the second major surface of the first adhesive layer contacts the first major surface of the second adhesive layer. Regarding claim 30, note a backing (Fig. 3, #301) on the second major surface of the second adhesive layer (Fig. 3, #302). Regarding claim 31, note a cap layer (Fig. 4, #405) on the first major surface of the first adhesive layer (Fig. 4, #403). Regarding claim 32, note the first major surface of the first adhesive layer (Fig. 3, #303) contacts the first major surface of the second adhesive layer (Fig. 3, #302). Regarding claim 33, note a backing layer (Fig. 4, #405) on the second major surface of the first adhesive layer (Fig. 4, #403). Regarding claim 34, note the first adhesive layer has a first pattern of structures on the first major surface thereof (Fig. 4, #403) and the second adhesive layer has a second pattern of structures on the first major surface thereof (Fig. 4, #402), and wherein the first pattern is

substantially aligned with the second pattern. Regarding claim 35, note the first pattern (Fig. 3, #303) is misaligned with the second pattern (Fig. 3, #302).

7. Claims 1, 3-8, 10, 12, 14, 15, 19-21 and 28-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Hata (WO 97/33946).

Regarding claim 1, Hata discloses an article comprising at least one adhesive layer (Fig. 2b, #10 and Fig. 7, #302) with a first major surface (Fig. 2b, #2) and a second major surface (Fig. 2b, #5), wherein at least one of the first and second major surface is a structured surface (Fig. 2b, #2); and a backing (Fig. 2b, #3) laminated to the structured surface of the adhesive layer, wherein the exposed surface of the backing is unstructured (Fig. 2b, #3), wherein the article comprises discrete reservoirs between the structured surface of the adhesive layer and the backing (Fig. 2b, #41), and wherein the article has a non-structured exposed surface that can be adhered to a target substrate (Fig. 2b, #6). Regarding claims 3 and 4, the adhesive layer is a pressure sensitive adhesive consisting of acrylics (see page 12, lines 13-16). Regarding claim 5, the article has thickness of about 2 μm to about 500 μm (see page 9, lines 1-2). Regarding claim 6, the adhesive layer is a structured adhesive layer (Fig. 2b, #10). Regarding claim 7, note at least one non-adhesive layer in contact with one of the first and second major surfaces (Fig. 2b, #6). Regarding claim 8, the article comprises a non-structured exposed surface (Fig. 2b, #1). Regarding claims 10, 12, 14 and 15, the article comprises a plurality of discrete reservoirs, each reservoir having a void volume of less than 100 μl and contains at least one deliverable or non-deliverable substance (see page 10, lines 30-32 and page 3, lines 6-11). Regarding claim 19, the backing is a laminate (Fig. 7, #304 and #305). Regarding claim 20, note a backing adjacent the second major surface (Fig. 2b, #6). Regarding claim 21, note the second major surface is a

structured surface (Fig. 2b, #10), the backing contacts the first major surface (Fig. 2b, #6), and wherein the article further comprises a backing layer on the second major surface (Fig. 2b, #3). Regarding claim 28, note a second adhesive layer (Fig. 3a, #13) having a first major surface and a second major surface, wherein at least one of the first and second major surfaces is a structured surface, wherein the adhesive layer and the second adhesive layer are in contact (see page 16, lines 24-31). Regarding claim 29, the first major surface of the first adhesive layer is a structured surface and the second major surface of the first adhesive layer is a non-structured surface (Fig. 3a, #10), and the first major surface of the second adhesive layer is a structured surface and the second major surface of the second adhesive layer is a non-structured surface (Fig. 3a, #13), and the second major surface of the first adhesive layer contacts the first major surface of the second adhesive layer. Regarding claim 30, note a backing (Fig. 3a, #6) on the second major surface of the second adhesive layer (Fig. 3a, #13). Regarding claim 31, note a cap layer (Fig. 3a, #3 or #6) on the first major surface of the first adhesive layer (Fig. 3a, #10 or #13). Regarding claim 32, the first major surface of the first adhesive layer (Fig. 3a, #10) contacts the first major surface of the second adhesive layer (Fig. 3a, #13). Regarding claim 33, note further a backing layer on the second major surface of the first adhesive layer (Fig. 3a, #6). Regarding claim 34, the first adhesive layer has a first pattern of structures on the first major surface (Fig. 3a, #10) thereof and the second adhesive layer has a second pattern of structures on the first major surface thereof (Fig. 3a, #13), and wherein the first pattern is substantially aligned with the second pattern (Fig. 3a). Regarding claim 35, the first pattern is misaligned with the second pattern (Fig. 3a).

8. Claims 53 and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Noreen et al. (US 5,158,557).

Noreen et al. discloses an article comprising at least one first layer with a first major surface and a second major surface, wherein at least one of the first and second major surfaces is a structured surface (Fig. 12, #14), and a cap layer laminated to a structured surface of the first layer, wherein the cap layer comprises an adhesive and is non-structured on both surfaces (Fig. 12, #26), and wherein the article has a non-structured exposed surface that can be adhered to a target substrate (Fig. 12, #24). Regarding claim 55, the first layer comprises a polymeric film (see col. 8, lines 13-40).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 22, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hata (WO 97/33946).

Hata discloses a tape comprising at least one pressure sensitive adhesive layer (Fig. 2b, #10) comprising a first major surface and a second major surface, wherein the first major surface is a structured surface (Fig. 2b, #2) and the second major surface is a non-structured surface (Fig. 2b, #5), and a non-adhesive backing (Fig. 2b, #3) laminated to the first major surface, wherein the tape comprises discrete reservoirs (Fig. 2b, #41) between the structured surface of the adhesive layer and the backing. However, Hata fails to teach the tape having a peel strength of at least 21-42 oz/0.5 inch for a thickness of 0.003 to 0.007 inches. Hata does teach the tape having a

peel strength (see page 14, lines 16-24). Therefore, the optimum range for the peel strength would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results. Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the tape in Hata to have a peel strength of at least 21-42 oz/0.5 inch for a thickness of 0.003 to 0.007 inches, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II)*.

Regarding claim 26, Hata teaches a backing adjacent the second major surface (Fig. 2b, #6). Regarding claim 27, Hata teaches the backing (Fig. 7, #301) being a structured layer.

11. Claims 22, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe (WO 99/58620).

Abe discloses a tape comprising at least one pressure sensitive adhesive layer (Fig. 4, #403) comprising a first major surface and a second major surface, wherein the first major surface is a structured surface and the second major surface is a non-structured surface, and a non-adhesive backing (Fig. 4, #401 and/or #402) laminated to the first major surface, wherein the tape comprises discrete reservoirs between the structured surface of the adhesive layer and the backing (see page 9, lines 25-31). However, Abe fails to teach the tape having a peel strength of at least 21-42 oz/0.5 inch for a thickness of 0.003 to 0.007 inches. The optimum range for the peel strength would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results. Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified

the tape in Abe to have a peel strength of at least 21-42 oz/0.5 inch for a thickness of 0.003 to 0.007 inches, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II)*.

Regarding claim 26, Abe teaches a backing adjacent the second major surface (Fig. 4, #405). Regarding claim 27, Abe teaches the backing (Fig. 4, #402) being a structured layer.

12. Claims 56-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hata (WO 97/33946).

Regarding claims 56 and 57, Hata teaches the presently claimed article as detailed above except for the void volume of each reservoir being less than about 20 nL and less than about 4 nL. However, Hata does teach the volume of each reservoir being within a range of 0.8 to 600 mm³ (see page 10, lines 30-32). Therefore, the optimum ranges for the void volume of each reservoir would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results. Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the reservoirs in the adhesive sheet of Hata to each have a void volume of less than about 20 nL and less than about 4 nL, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II)*.

Regarding claims 58-60, note in Hata the reservoirs contain at least one deliverable or non-deliverable substance selected from the groups recited in claims 59 and 60 (see page 3, lines 6-12).

13. Claims 10, 12 and 56-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe (WO 99/58620).

Abe teaches the presently claimed article as detailed above except for each of the reservoirs having a void volume of less than 100 μ l, less than about 20 nL and less than about 4 nL. The optimum ranges for the void volume of each reservoir would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results. Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the reservoirs in the adhesive sheet of Abe to each have a void volume of less than 100 μ l, less than about 20 nL and less than about 4 nL, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II)*.

14. Claims 14-17, 59 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe (WO 99/58620) in view of Sher et al. (US 6,197,397).

Abe teaches the presently claimed article as detailed above. However, Abe fails to disclose the channels and reservoirs containing a deliverable or non-deliverable substance being selected from the groups recited in each of claims 14-17, 59 and 60. Sher et al. teaches that it is old and well-known in the analogous art to have an adhesive provided with channels containing fluids for the purpose of permitting controlled ingress of fluids at a desired time to affect the adhesive interface such as to facilitate removal, alter surface characteristics and provide additional remedial treatments (see col. 5, lines 33-37 and col. 8, lines 55-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention

was made to have modified the channels and/or reservoirs in Abe to contain at least one deliverable or non-deliverable substance such as liquids and antibiotics as taught by Sher et al. in order to permit controlled ingress of fluids at a desired time to affect the adhesive interface such as to facilitate removal, alter surface characteristics and provide additional remedial treatments.

Response to Arguments

15. Applicant's arguments filed 4/28/06 have been fully considered but they are not persuasive.

Applicants argue "claim 1 has been amended to include the limitation that the article has a non-structured exposed surface that can be adhered to a target substrate... This amended claim 1 is believed to be patentable because, at the very least, WO 99/58620 to Abe ("Abe"), WO 97/33946 to Hata ("Hata"), and JP 08-100155 to Tajima et al. ("Tajima") do not disclose such an article". However, as shown in the rejections above, both Hata and Abe clearly teach the article as now presently claimed. Thus, the claims fail to patentably define over the prior art.

Applicants further argue "claim 53 has been amended to include the same limitation added to claim 1. This amended claim 53 is believed to be patentable because, at the very least, US 5,158,557 to Noreen et al. ("Noreen") does not disclose such an article". However, as shown in the 102 rejection above, Noreen clearly teaches the article as now presently claimed. Thus, the claims fail to patentably define over the prior art.

Furthermore, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion


16. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Catherine A. Simone
Examiner
Art Unit 1772
July 7, 2006


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

7/7/06